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PATENT & TRADEMARK OFFICE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

HARKNESS et al.

Serial No.: 09/955,691

For: DETECTION OF MEDIA LINKS IN BROADCAST SYSTEMS

Filed: September 19, 2001

Group Art Unit: 2611

Examiner: Jason P. Salce

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March 13, 2006

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SECOND BRIEF ON APPEAL

Mail Stop Appeal Brief
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to the Notice of Appeal mailed December 12, 2005 in connection with the above-identified patent application, Applicants respectfully submit the instant Brief on Appeal in accordance with 37 C.F.R. § 41.37.

I. Real Party In Interest

The above-referenced patent application has been assigned to Nielsen Media Research, Inc., who is the real party in interest to this appeal. The

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assignment has been recorded in the United States Patent and Trademark Office ("PTO") at Frame 0127 of Reel 014164.

II. Related Appeals and Interferences

The applicant is unaware of any related appeals or interferences.

III. Status of the Claims

Currently, claims 1-24, 26-33 and 48-50 are pending in this application. The pending claims are presented in the Claims Appendix of this Brief. Claims 1-24, 26-33 and 48-50 stand rejected. Therefore, claims 1-24, 26-33 and 48-50 form the subject matter of this appeal.

By way of background, this application is a continuation-in-part of US Patent application serial number 09/226,521, which was filed on January 7, 1999. The claims filed in the application on appeal were very similar to the claims filed in the parent application[1]. To eliminate this unwarranted duplication, the applicants abandoned the parent application without prejudice to pursuing the claims of that application in the current application.

The application on appeal was filed on September 19, 2001.

On August 1, 2003, the Examiner issued a first substantive Office action rejecting all of the claims as filed as being unpatentable over one or more of Shoff et al., U.S. Patent 6,240,555 (Shoff) and Menard et al., U.S. Patent 6,061,056 (Menard). On December 5, 2003, the applicants filed a

[1] The meaning of the term "media link" was been clarified, and possibly broadened, in the specification of this continuation-in-part application.

response to the first substantive Office action demonstrating that the rejections based on Shoff and Menard were completely devoid of merit.

The Examiner agreed, withdrew the rejections based on Shoff and Menard, and issued a new Office action rejecting all of the pending claims as unpatentable over one or more of Thomas et al., U.S. Patent 5,481,294, Lert, Jr. et al., U.S. Patent 4,677,466, Killian, U.S. Patent 6,163,316, and Lu et al., U.S. Patent 5,594,934; (all of which, except for Killian, are commonly owned with the current application by the Nielsen companies). The Office action was made "final."

Because the applicants and the Examiner had arrived at diametrically opposed positions, the applicants had little choice but to file a notice of appeal. Such a notice was filed on July 27, 2004. Subsequently, the applicants filed the required appeal brief documenting in detail the reversible errors contained in the final Office action. Among other things, the applicants demonstrated that the Examiner had committed legal error in construing the claim term "media link" to have an unreasonably overbroad meaning that was inconsistent with usage of the term in applicants' specification and usage of that term in the cited art.

Apparently, the peer review panel that reviewed applicants' appeal brief were convinced by the applicants' showing because, rather than issuing an Examiner's Answer, prosecution was re-opened and a new Office action was issued on August 11, 2005.

However, the new Office action commits the very same legal error in that it again mis-construes the term "media link" to have an erroneously

overbroad meaning inconsistent with applicants' specification and the cited art. Accordingly, since the same legal error continues to lead to the same erroneous rejections, the applicants had no choice but to reinstate this appeal.

The second notice of appeal was filed on December 12, 2005 and received by the USPTO on December 14, 2005. Claims 1-24, 26-33 and 48-50 stand rejected and form the subject of this second appeal.

IV. Status of the Amendments

The only amendments that were made in this application have been entered. No amendments were filed after the final Office action. No further amendments are necessary.

V. Summary of the Claimed Subject Matter

Although reference numerals and specification citations are inserted below in accordance with C.F.R. 41.37(c)(1)(v), these references numerals and citations are merely examples of where support may be found in the specification for the terms used in this section of the brief. There is no intention to in any way suggest that the terms of the claims are limited to the examples in the specification. Although, as demonstrated by the reference numerals and citations below, the claims are fully supported by the specification as required by law, it is improper under the law to read limitations from the specification into the claims. Pointing out specification support for the claim terminology as is done here to comply with rule 41.37(c)(1)(v) does not in any way limit the scope of the claims to those

examples from which they find support. Nor does this exercise provide a mechanism for circumventing the law precluding reading limitations into the claims from the specification. In short, the reference numerals and specification citations are not to be construed as claim limitations or in any way used to limit the scope of the claims.

In the invention as defined in claim 1, a detection apparatus (page 10, line 5) to identify a program is recited as comprising: a tuner 14 to tune to the program (page 13, lines 2-5); a meter 17 coupled to the tuner 14 to record a media link embedded in the program tuned by the tuner 14 (Id. At lines 8-16); and a program identifier 32 to identify the program tuned by the tuner 14 based on the media link recorded by the meter 17 (page 16, lines 1-4).

In the invention as defined in claim 2, the tuner 14 recited in claim 1 is defined to include a scanning tuner (page 29, lines 14-19).

In the invention as defined in claim 3, the scanning tuner of claim 2 is defined to tune to a plurality of channels (Id.), and the meter 17 is arranged to record media links from programs carried in the tuned channels (page 29, lines 6-19).

In the invention as defined in claim 4, the program identifier 32 of claim 1 is arranged to identify the program directly from the media link (page 16, lines 20-21).

In the invention as defined in claim 5, the program identifier (32) of claim 1 is arranged to identify the program by accessing a content provider (page 17, lines 5-10).

In the invention as defined in claim 6, the program identifier 32 of claim 1 is arranged to receive a manual identification of the program (Id).

In the invention as defined in claim 7, the media link of claim 1 is defined to be a URL (page 1, lines 17-20).

In the invention as defined in claim 8, the media link of claim 1 is defined to be a code referenced to a URL (page 2, lines 2-6).

In the invention as defined in claim 9, the media link of claim 1 is defined to be a trigger (page 2, lines 4-9).

In the invention as defined in claim 10, a data acquisition system (page 10, line 11) to acquire identifying data from a program is recited to comprise: a tuner 14 to tune to the program (page 13, lines 2-5); and a meter 17 coupled to the tuner 14 and arranged to capture first and second program identifying data identifying the program tuned by the tuner 14 (page 13, line 8 – page 14, line 2). The first program identifying datum is a media link embedded in the program which, when activated, initiates a request for information from a content provider via a network (page 13, lines 9 --18 and page 2, lines 2-6). The second program identifying datum is a program identifying datum other than a media link (page 13, line 19 – page 14, line 2).

In the invention as defined in claim 11, the tuner 14 of claim 10 comprises a scanning tuner (page 29, lines 14-19).

In the invention as defined in claim 12, the scanning tuner of claim 11 is recited to tune to a plurality of channels (Id.), the meter 17 is arranged to capture media links from programs in the tuned channels (page 29, lines 6-19),

and the meter 17 is arranged to capture second program identifying data identifying programs in the tuned channels (page 13, line 19 – page 14, line 2).

In the invention as defined in claim 13, the data acquisition system of claim 10 is recited to additionally include a program identifier 32 arranged to identify the program from the first and/or second program identifying data (page 16, lines 1-4).

In the invention as defined in claim 14, the program identifier of claim 13 is arranged to identify the program by comparing the first and/or second program identifying data to corresponding first and/or second reference identifying data (page 16, lines 1-14, and page 17, lines 13-20).

In the invention as defined in claim 15, the second program identifying datum of claim 10 is a signature extracted from the program (page 13, line 19 – page 14, line 1).

In the invention as defined in claim 16, the data acquisition system of claim 10 is arranged to keep the second program identifying datum only if the meter fails to acquire the first program identifying datum (Id.).

In the invention as defined in claim 17, the data acquisition system of claim 10 further includes a program identifier 32 arranged to identify the program directly from the media link (page 16, lines 1-4 and 20-21).

In the invention as defined in claim 18, the data acquisition system of claim 10 further includes a program identifier 32 arranged to identify the program by activating the media link to initiate the request for information from the content provider (page 17, lines 5-10).

In the invention as defined in claim 19, the data acquisition system of claim 10 further includes a program identifier 32 arranged to receive a manual identification of the program (Id.).

In the invention as defined in claim 20, the media link of claim 10 is a URL (page 1, lines 17-20).

In the invention as defined in claim 21, the media link of claim 10 is a code referenced to a URL (page 2, lines 2-6).

In the invention as defined in claim 22, the media link of claim 10 is a trigger (page 2, lines 4-9).

In the invention as defined in claim 23, the meter 17 of claim 10 is arranged to capture the second program identifying datum from the program only in the event that the meter is unable to capture the first program identifying datum from the program (page 13, line 19 – page 14, line 1).

In the invention as defined in claim 24, a program identification system (page 11, lines 1-2) is recited. The system comprises: a tuner 14 tunable to at least one of a plurality of channels (page 13, lines 2-5); and a meter 17 coupled to the tuner 14 (page 13, lines 8-10). The meter 17 is arranged to detect a media link embedded in a program carried in a channel tuned by the tuner 14 and to extract a broadcast signature from the program (page 13, line 10 – page 14, line 2). The recited system also includes a comparator arranged to generate a subset of reference signatures from a library of reference signatures based upon the media link, and to compare the broadcast signature extracted by the meter 17 to the subset of reference

signatures (page 11, lines 8-11, page 21, line 18 – page 22, line 10, and page 24, lines 14-19).

In the invention as defined in claim 26, the media link of claim 24 is a URL (page 1, lines 17 -20).

In the invention as defined in claim 27, the media link of claim 24 is a code referenced to a URL (page 2, lines 2-6).

In the invention as defined in claim 28, the media link of claim 24 is a trigger (page 2, lines 4-9).

In the invention as defined in claim 29, a program identification system is recited (page 11, lines 1-3). The system comprises: a tuner 14 tunable to at least one of a plurality of channels (page 13, lines 2-5); and a meter 17 coupled to the tuner 14 (page 13, lines 8-16). The meter 17 is arranged to detect closed captioning information from a program carried in a channel tuned by the tuner 14 and to extract a broadcast signature from the program (page 22, lines 3-10). The system also includes a comparator arranged to compare the broadcast signature to a reference signature (page 11, lines 8-11). The reference signature is selected from a library of reference signatures based upon the closed captioning information (page 21, line 18 – page 22, line 10).

In the invention as defined in claim 30, if the broadcast signature of claim 24 does not have an embedded media link, the comparator is arranged to generate a second subset of reference signatures from the library of reference signatures based upon a hash code, and to compare the broadcast signature

extracted by the meter 17 to the second subset of reference signatures (page 25, lines 3-12).

In the invention as defined in claim 31, the reference signature of claim 24 is recited to include an identification of the program (page 17, lines 15-20).

In the invention as defined in claim 32, the broadcast signature of claim 24 is recited to include the channel and a time at which the broadcast signature is extracted (page 14, lines 11-21).

In the invention as defined in claim 33, the reference signature of claim 32 includes an identification of the program (page 17, lines 15-20).

In the invention as defined in claim 48, the media link of claim 1 is a hyperlink (page 1, lines 17-18).

In the invention as defined in claim 49, the media link of claim 10 is a hyperlink (page 1, lines 17-18).

In the invention as defined in claim 50, the media link of claim 24 is a hyperlink (page 1, lines 17-18).

VI. Grounds of Rejection To Be Reviewed on Appeal

The grounds of rejection to be reviewed on appeal are as follows:

Ground 1: The Examiner's contention that an "ancillary code" is a "media link."

Ground 2: The Examiner's contention that Thomas anticipates claim 1.

Ground 3: The Examiner's contention that Thomas anticipates claim 5.

Ground 4: The Examiner's contention that Thomas anticipates claim 6.

Ground 5: The Examiner's contention that Col. 17, lines 15-28 of Thomas describes a comparator to generate a subset of reference signatures from a library of reference signatures based upon a media link embedded in a program as recited in claim 24.

Ground 6: The Examiner's contention that Thomas anticipates claim 29.

Ground 7: Whether it is obvious to use a media link embedded in a broadcast program to identify the broadcast program.

Ground 8: The Examiner's contention that claim 18 is rendered obvious by Thomas when considered in view of Killian.

VII. Argument

Ground 1. The Examiner's Contention That An "Ancillary Code" Is A "Media Link" Is In Error

Background

The Examiner's rejections of claims 1-24, 26-28, 30-33 and 48-50 are based upon an unreasonably overbroad construction of the claim term "media link." By way of background, in the first appeal of this application, the Examiner construed "media link" in an excessively overbroad manner by arguing that a "broadcast signature" was a "media link." In particular, the Examiner previously argued that a broadcast signature is a "media link" because a broadcast signature "represents a portion of program tuned to and therefore is related (linked) to a piece of media (the television program)." In other words, the Examiner argued that because a broadcast signature is "related to" a media program (e.g., a television program), it is "linked" to the media program and, thus, is a "media link." In effect, the Examiner deconstructed the term "media link" into the words "media" and "link,"

argued that "linked" equals "related," and thus, concluded that a "media link" is anything related to media. The problem with this approach is, of course, that it attempts to construe the term "media link" in complete isolation from the applicants' specification.

The applicants demonstrated this legal error in its brief in the prior appeal and the peer review panel evidently agreed with the applicants, since prosecution was reopened and a new action issued. The new Office action mailed on August 11, 2005 indicates that "The examiner agrees with Applicant on how a broadcast signature does not contain a media link, however, Thomas also discloses various types of code readers that detect ancillary codes, which read on the media link limitation." (Office action dated August 11, 2005, Page 2)(emphasis in original). Thus, the Examiner has relinquished his prior construction of "media link" as erroneous, and taken a second bite at the claim construction apple. However, this second claim construction suffers from the same legal error as the first. In particular, this new claim construction is unreasonably overbroad because it is completely isolated from applicants' specification.

The Correct Claim Construction

Before demonstrating the errors in the Examiner's claim construction, the applicants will first provide a legally proper claim construction. Before undertaking this process, the applicants respectfully remind the Board that the "fact that claims receive their broadest reasonable meaning during the patent examination process does not relieve the PTO of its essential task of

examining the entire patent disclosure to discern the meaning of claim words and phrases." Rowe v. Dror, 42 U.S.P.Q.2d 1550, 1555 (Fed. Cir. 1997). Further, "claims are read in light of the disclosure of the specification on which they are based, not in a vacuum." In re Dean, 130 U.S.P.Q. 107, 110 (C.C.P.A. 1961). As explained in the next section of this Brief, the Examiner's claim construction does not follow these legal principles, but instead gives the term "media link" an intentionally overbroad and unreasonable meaning.

Turning first to the usage in the art, a person of ordinary skill in the art of audience measurement reading the instant application would never understand an "ancillary code" to be a "media link." In the context of the audience measurement art, an ancillary code is ***a passive label inserted into a broadcast program for the express purpose of uniquely identifying that particular program***. The code is identified as "ancillary" in that it is not content and is not used to deliver content to the audience. Instead, it is a label inserted by the broadcaster and made known in advance to an audience measurement company to enable the audience measurement company to record the label when detected at a monitored audience site and to compare the recorded label to a database to uniquely identify the corresponding broadcast program tuned by an audience member. This point is underscored by the usage of the term "ancillary code" in Thomas, U.S. Patent 5,481,294 ("Thomas"). In particular, Thomas states:

> ***One suggested approach*** to avoiding this confusion ***is to label each broadcast program with an ancillary code*** (e.g., a digital code

> written on a selected video line in the vertical blanking interval of each video program to be broadcasted and/or monitored). This ancillary code can then be read by the metering equipment in the sampled households and can be compared (e.g., in a central office computer) to the ancillary codes stored in a code-program name library. ***The code-program name library contains a manually entered list of program names and the codes associated therewith.*** Thus, ***given an ancillary code of a program selected for viewing and/or listening*** in the sampled households, ***the program name of this program can be easily determined from the library.***

(Thomas, Col. 2, lines 10-24)(emphasis added). Thus, the Thomas Patent makes it clear that an "ancillary code" is a label embedded in a broadcast signal to uniquely identify the corresponding program. Thomas goes on to further emphasize this point:

> The ancillary code may have any form ***as long as the program and/or station associated therewith is uniquely identified*** by the ancillary code.

(Thomas, Col. 11, lines 40-42)(emphasis added). Thus, Thomas makes it quite clear that an ancillary code is not content, but is ***merely a label that must uniquely identify the program and/or station*** with which the ancillary code is associated. This definition of "ancillary code" from the prior art is consistent with the applicants' specification which explains usage of ancillary codes in the prior art as follows:

> Accordingly, systems have been developed in order to identify transmitted programs. For example, in connection with reporting program ratings, a program verification system known as AMOL (Automated Monitoring of Line-Up) program verification system is operated by the

> assignee of the present invention. In this AMOL program verification system, ***a code is inserted into the vertical blanking interval of programs***. ***Monitoring equipment*** at sites located in relevant geographic areas ***read the AMOL codes from transmitted programs*** and detect the channels in which these programs are transmitted as well as the times during which these programs are transmitted. ***Accordingly, the AMOL program verification system is able to verify that particular programs were transmitted in corresponding particular channels, during corresponding particular time slots***...

(Applicants' specification, Page 4, line 7 – Page 5, line 5)(emphasis added). Thus, both the applicants' specification and the prior art are in agreement that ***an ancillary code is a label inserted into a program to uniquely identify that particular program*** to an audience measurement company.

The term "media link," on the other hand, has a totally different meaning. Applicants' specification expressly defines the term "media link" as follows:

> as used herein, media links include URLs embedded in video and/or audio, surrogate URLs, or any other links in video and/or audio that link a content recipient to content provided by a content provider (such as a Web site) or to content provided elsewhere in the video and/or audio whether such content is stored in cache or not.

(Specification, Page 1, line17 – Page 2, line 4). Thus, it is quite clear that the ***applicants have defined the term "media link" to be any link that links a content recipient to additional content***. This is consistent with industry usage of the term "link," where persons of ordinary skill in the art commonly refer to hyperlinks (which, of course, are references to additional content in the form

of web pages) as "links." Since *an ancillary code is a label inserted into a program to uniquely identify that particular program*, it does not reference additional content or in any way link a content recipient to additional content. Instead, ***an ancillary code uniquely identifies the program in which it is embedded and does not provide a link or reference to any other content***. The fact that the ancillary code uniquely identifies the program in which it is embedded makes it incapable of linking to other content. In contradistinction, ***a media link, by definition, points to content other than the program in which it is embedded, and, thus, does not necessarily uniquely identify that program***. Thus, an ancillary code cannot be said to be a "media link" as used in the specification and by persons of ordinary skill in the art.

This point is borne out throughout the applicants' specification. Specifically, in an example given in the specification, the disclosed apparatus and methods are capable of extracting broadcast signatures, ***detecting media links and detecting ancillary codes*** (See, e.g., specification, page 30, lines 1-3). Therefore, it is quite plain that the applicants' specification uses the term "media link" to be something different than an ancillary code and that a person or ordinary skill in the art reading applicants' specification would not understand the term "media link" to refer to an ancillary code.

This point is further demonstrated by the fact that "ancillary codes" are "ancillary" because they are not involved with providing content to the audience. In contrast, a media link provides access to content. As such, a media link, by definition, is not "ancillary," but instead is primary to providing content. Accordingly, not only is there clear functional and definitional

differences between a "media link" and an "ancillary code," but referring to a "media link" as an "ancillary code" is facially inconsistent with the ordinary meaning of "ancillary" in the art. Accordingly, a proper claim construction demonstrates that "media link" and " ancillary code" are not interchangeably equivalent terms.

The Examiner's Claim Construction

The above claim construction analysis carefully follows the law requiring that claims be construed to be consistent with the specification and usage in the art. In contrast, the Examiner's claim construction of "media link" is completely devoid of any reference to applicants' specification and is unsupported by the cited art. Indeed, the Examiner offers almost no evidence or argument in support of his construction of "media link." Instead, he merely asserts his position that an "ancillary code" reads on a "media link." For example, the Office action of August 11, 2005 states, "Thomas also discloses various types of code readers that detect ancillary codes, which read on the media link limitation." (Office action dated August 11, 2005, Page 2). This statement is nothing more than a naked assertion; not a reasoned explanation identifying any evidence-based rationale for why "ancillary code" reads on "media link."

As another example, the Office action of August 11, 2005 states:

> Thomas also discloses a meter coupled to the tuner to record a media link embedded in the program tuned by the tuner (see the reference code reader 86 in Figure 2C and Column 13, Lines 30-34 for the code [reader] 86 reading the

> same ancillary code as the household reader 60 and Column 11, lines 40-49 for the ancillary code identifying the program and/or station, thereby providing an embedded media link).

(Office action dated August 11, 2005, Page 3)(emphasis in original). However, while this statement and citations certainly demonstrate that Thomas uses ancillary codes, it provides no explanation whatsoever as to why the Examiner is construing the term "media link" to be equivalent to "ancillary code." Indeed, the cited portions of Thomas merely support applicants' assertion that an "ancillary code" is a program name label embedded in a broadcast signal to uniquely identify the corresponding program. For example, Column 11, lines 40-49 of Thomas contain the above-quoted statement that "The ancillary code may have any form ***as long as the program and/or station associated therewith is uniquely identified*** by the ancillary code." Neither this statement nor the remainder of Column 11, lines 40-49, makes any reference to the term "media link" or in any way asserts equivalence between an ancillary code and a media link. Further, the fact that Thomas requires an ancillary code to uniquely identify the program in which it is embedded of necessity excludes "media links" from the scope of "ancillary codes," *because a media link refers to content other than the program in which it is embedded.*

The second passage of Thomas relied upon by the Examiner similarly fails to support the Examiner's asserted equivalence between the terms "media link" and "ancillary code." Specifically, Column 13, Lines 30-38 of Thomas states:

> The reference apparatus 32 may incorporate a reference code reader 86 for each received channel. The reference code reader 86 reads the same ancillary code that is read by the household code reader 60 at the statistically selected household 12. ***The code read by the reference code reader 86 is subsequently compared to code and program name data stored in a code-program name library 88*** at the central data site in an effort to identify the program broadcast by a given broadcaster at a given time.

(Id.)(emphasis added). Again, this cited portion of Thomas fails to use the term "media link" or offer any support whatsoever for any alleged equivalence between an ancillary code and a media link. Instead, it merely refers to the conventional usage of an ancillary code which, as explained above, uniquely identifies the program in which it is embedded, to identify a broadcast program by referencing a code-program name library. Again, this unique one-to-one relationship between the ancillary code and the program in which it is carried is very different from a media link which is embedded in a first program, but refers to other content.

In view of the foregoing, it is abundantly clear that, whereas applicants' claim construction of the term "media link" is consistent with the applicants' specification and prior art, the Examiner's claim construction is unsupported by even a single reference to applicants' specification and is not supported by the cited art. Indeed, the portions of the art relied upon by the Examiner support applicants' claim construction. Given the Examiner's complete failure to construe the term "media link" in light of the disclosure of the specification on which they are based, it is clear that the Examiner's claim

construction is based on legal error and must be overturned. Consequently, the rejections of claims 1-24, 26-28, 30-33 and 48-50 are all fatally flawed and must be overturned.

Ground 2: The Examiner's Contention That Thomas Anticipates Claim 1 Is In Error.

As demonstrated in the previous section, the rejections of claims 1-24, 26-28, 30-33 and 48-50 are based on a legally errored and unreasonably over broad construction of the term "media link." As such, the rejection of claim 1 is in error and must be overturned.

The Office action of August 11, 2005 contends that claim 1 is anticipated by Thomas. However, while Thomas does teach collecting ancillary codes and extracting program signatures as part of an audience measurement system, Thomas does not teach collecting a media link embedded in a tuned program to identify that tuned program. As such, Thomas cannot anticipate claim 1 and the 35 U.S.C. § 102 rejections of claim 1 and its dependent claims are clearly in error and must be overturned.[2]

Ground 3: The Examiner's Contention That Thomas Anticipates Claim 5 Is In Error.

Independent claim 1 recites a program identifier to identify the program tuned by the tuner based on the media link recorded by the meter.

[2] As explained in detail below in connection with Ground 7, Thomas also fails to suggest collecting media links as a vehicle to identifying tuned programs because it is far from obvious that a media link, which by definition refers to additional content, would be useful in identifying the program in which it is embedded.

Dependent claim 5 recites that the program identifier of claim 1 is arranged to identify the program ***by accessing a content provider***. The Examiner contends that Thomas anticipates claim 5 because Column 11, lines 40-42 of Thomas refer to "identifying the station from the ancillary code, therefore a program can also be identified by accessing the station id/content provider." (Office action dated August 11, 2005, Pages 3-4). However, the cited portion of Thomas does not in any way indicate that a program identifier identifies a program based on a media link by accessing a content provider. Instead, the cited portion of Thomas merely states:

> The ancillary code may have any form as long as the program and/or station associated therewith is uniquely identified by the ancillary code.

(Thomas, Col. 11, lines 40-42). Clearly, the fact that an ancillary code can identify a program and/or station does not even hint at, let alone anticipate, accessing a content provider to identify a program based on a media link. Accordingly, Thomas does not anticipate claim 5 and the rejection must be overturned.

Ground 4: The Examiner's Contention That Thomas Anticipates Claim 6 Is In Error.

Independent claim 1 recites a program identifier to identify the program tuned by the tuner based on the media link recorded by the meter. Dependent claim 6 recites that the program identifier of claim 1 is arranged to receive a manual identification of the program. The Examiner contends that claim 6 is anticipated by Thomas because "the ancillary code provides

information to identify the program, therefore when code reader 86 reads the code, the ancillary code provides a manual identification of the program." (Office Action dated August 11, 2005, Page 4)(emphasis in original). This statement is far from clear and borders on being a non-sequitor. The term "manual identification" clearly refers to a non-automated act. Accordingly, the Examiner's reference to the "code reader 86 read[ing] the code" to provide a manual identification of the program makes no sense and is clearly not a basis for concluding that Thomas anticipates claim 6. Consequently, the rejection of claim 6 must be reversed.

Ground 5: The Examiner's Contention That Col. 17, Lines 15-28 Of Thomas Describes A Comparator To Generate A Subset Of Reference Signatures From A Library Of Reference Signatures Based Upon A Media Link Embedded In A Program As Recited In Claim 24 Is In Error.

The Office action dated August 11, 2005 rejects claim 24 as being anticipated by Thomas. However, independent claim 24, and all claims depending therefrom, are also allowable over Thomas. Claim 24 recites a comparator to generate a subset of reference signatures from a library of reference signatures based upon a media link embedded in a program. The final Office action attempts to find such a comparator at Column 17, Lines 15-28 of Thomas. However, the noted section of Thomas does not use media links to generate a subset of reference signatures for comparison with a broadcast signature. Instead, it describes determining if an ancillary code is present in a signal. If the ancillary code is present, the noted section of Thomas describes comparing the ancillary code to a library of ancillary codes

to determine the program associated with that code. If an ancillary code is not present, the noted section of Thomas describes collecting a broadcast signature for later comparison against a library of signatures in an effort to identify the program.

Nowhere does this passage of Thomas: (1) use a media link; (2) create a subset of reference signatures from a library of reference signatures; (3) create such a subset of reference signatures based on a media link; or (4) compare a broadcast signature to a subset of reference signatures created from a library based upon a media link. Therefore, it is evident that the Examiner's reliance on Column 17, Lines 15-28 of Thomas to meet the recitation of claim 24 is misplaced.

As was noted in the Response to the Office action of August 1, 2003 and applicants' first appeal brief, Thomas does disclose performing clustering or other sorting techniques to minimize the size of the reference library (see Thomas, Col. 19, lines 18-32, citing to Lert, U.S. Patent 4,677,466). However, Thomas makes no disclosure or suggestion of using a media link embedded in a program to select a subset of the library for comparison to a broadcast signature as recited in claim 24. Further, as also noted in the Response to the Office action of August 1, 2003 and applicants' first appeal brief, the reference to the Lert Patent does not overcome the deficiency of the Thomas Patent. Whereas Lert does disclose comparing signatures against one another to remove duplicates (Col. 5, lines 27-29) and using a hash code representation of the signature to perform a preliminary search for candidate reference signatures (Col. 9, limes 63-65), Lert makes no reference to using a

media link extracted from the program to select a subset of reference signatures for comparison to a broadcast signature as recited in claim 24.

In view of the foregoing, the rejections of claim 24 and all claims depending therefrom (i.e., claims 26-28, 30-33 and 50) are based on error and must be overturned.

Ground 6: The Examiner's Contention That Thomas Anticipates Claim 29 Is In Error.

The Office action rejected claim 29 as being anticipated by Thomas. However, claim 29 recites a program identification system comprising a meter arranged to detect closed captioning information from a program carried in a channel tuned by the tuner and to extract a broadcast signature from the program; and a comparator arranged to compare the broadcast signature to a reference signature selected from a library of reference signatures based upon the closed captioning information. Thomas does not teach (1) using closed captioning information to select a reference signature from a library, or (2) comparing a broadcast signature of a broadcast program associated with the closed captioning information to the selected reference signature as recited in claim 29. Accordingly, Thomas does not anticipate claim 29, and the rejection of claim 29 must, therefore, be overturned.

Ground 7: It Is Not Obvious To Use A Media Link For Program Identification.

As noted above, the proper construction of the term "media link" is ***any link that links a content recipient to additional content***. As is well

known, such links are used to provide additional content to the content recipient utilizing the link. As explained in the applicants' specification:

> It is also expected that this video and/or audio will contain media links. Accordingly, if a user of a computer, digital television, set top box, or other video and/or audio receiving device is viewing a program of interest, and desires to access other information associated with the program, the user can click on the program ...with the result that additional information will be downloaded to the user's appliance.

(Specification, Page 8, line 17- Page 9, line 6). Thus, for example, a historical program on the American Civil War might include a link to a website with additional information about Abraham Lincoln, and activating the embedded link might provide the content recipient with information about Abraham Lincoln that is not otherwise present in the broadcast program.

Media links embedded in broadcast programs are, thus, intended as a vehicle to couple content recipients to additional content sources such as web pages available on the Internet. Media links are, by definition, intended to ***uniquely identify the linked content*** (e.g., the referenced web page), ***not the program within which they are embedded***. It is far from obvious that a reference to another source of content (i.e., a media link) embedded in a broadcast program signal can be useful for identifying the broadcast signal itself. While content sources linked to a broadcast program via an embedded media link are likely to contain content that is related to the general subject matter of the program in which they are embedded (e.g., a web page regarding Abraham Lincoln embedded in a Civil War documentary), this is not necessarily so. Moreover, ***embedded media links, by definition, identify***

media different from the program in which they are embedded, and, thus, are not obviously useful to identify the specific program in which they are embedded. As a result, the mere fact that it was known in the prior art to embed media links in broadcast programs as demonstrated by the Killian reference and by the applicants' statements in the background section of the application on appeal, does not make it obvious to use such embedded links as a vehicle for identifying broadcast programs.

Similarly, the fact that Thomas embedded program identification codes (i.e., ancillary codes) *uniquely identifying the programs in which they are embedded* precisely for the purpose of identifying those programs when received by monitored receiving equipment, does not make it obvious that *media links to content other than the broadcast programs in which they are carried* can be used to identify the programs within which they are embedded. Indeed, the only teaching for using media links embedded in programs to identify the programs in which they are embedded lies in the applicants' application on appeal. Of course, such hindsight reconstruction of the applicants' claimed invention is improper and cannot form the basis for rejecting the claims on appeal.

Killian, U.S. Patent 6,163,316, does not overcome this deficiency in Thomas. To be sure, Killian does in fact describe embedding a media link in a television broadcast program as a vehicle for providing additional content from the Internet to a viewer of that television program. (See Killian, Col. 5, lines 39-50). However, there is no hint in Killian that such a media link would be useful for audience measurement. As discussed above, Thomas also fails

to teach or suggest that a media link embedded in a television program, which, by definition, identifies media different from the television program in which it is embedded, would be useful to identify the television program in an audience measurement system. Since both Killian and Thomas fail to teach or suggest this concept, the combination of Killian and Thomas also fails to teach or suggest collecting media links embedded in broadcast programs as a vehicle for identifying the broadcast program.

The Office action dated August 11, 2005 attempts to overcome this deficiency in the Thomas/Killian combination by stating it would have been obvious to combine those references "for the purpose of integrating television signals and Internet information." (Office action dated August 11, 2005, Page 6). However, Killian by itself describes integrating television signals and Internet information. As such, it has no need for Thomas. Further, to the extent the Thomas audience measurement system is employed to monitor a Killian type broadcast, there is no teaching in either Killian or Thomas to collect the embedded media links to identify the broadcast program.

Indeed, Thomas already provides for collecting ancillary codes which are specifically designed to identify the broadcast program in which they are embedded. As such, there is no teaching or suggestion for monitoring media links, which identify something other than the program being monitored, in addition to or in place of monitoring ancillary codes, which specifically identify the broadcast program of interest. For example, substituting media link monitoring for ancillary code monitoring would be less desirable when ancillary codes are present as the media links are not intended to identify the

program in which they are embedded, but are instead intended to reference other content. Thus, there is no identifiable suggestion for substituting media links for ancillary codes. Further, there does not appear to be any teaching or suggesting for adding media link monitoring to the ancillary code monitoring Thomas already performs, since the broadcast signature collection taught in Thomas already provides a suitable backup to the ancillary code collecting. In short, neither Thomas nor Killian provides any indication of any need for media link monitoring in the Thomas system given the Thomas system already performs ancillary code monitoring and signature monitoring.

On the record on appeal, the only suggestion for modifying Thomas to perform media link monitoring lies in the applicants' specification. Of course, the teachings of the applicants' disclosure cannot be used to reject its claims. Therefore, because that the Office action has failed to identify a legally cognizable suggestion for modifying Thomas to perform media link monitoring, the obviousness rejections based on Thomas are in error and cannot stand.

A. Claims 7, 20, 26 and 48-50 Are Patentable

Against this background, it is clear that claims 7, 20, 26 and 48-50 are patentable over Thomas and Killian. For example, claims 7, 20 and 26 specify that the media link is a URL. Claims 48-50 specify that the media link is a hyperlink. URLs and hyperlinks inherently refer to content on the Internet. As such, they are referencing content different from the broadcast programs in

which they are embedded. As discussed above, while Killian clearly describes embedding URLs and/or hyperlinks in broadcast programs, it does not hint that such links would in any way be useful for identifying the programs in which they are embedded. Since Thomas also fails to provide any such suggestion, the combination of Thomas and Killian fails to teach or suggest claims 7, 20, 26 and/or 48-50. Therefore, claims 7, 20, 26 and 48-50 are unmistakably patentable over the references cited in the Office action.

B. Claims 8, 21 and 27 Are Patentable

Similarly, it is clear that claims 8, 21 and 27 are patentable over Thomas and Killian. For example, claims 8, 21 and 27 specify that the media link is a code referenced to a URL. As explained in applicants' specification, such a code "is embedded in content and may be used to look up an URL for linking to content." (Specification, Page 2, lines 1-4). Thus, a code referenced to a URL, like a URL itself, references content different from the broadcast programs in which they are embedded. As discussed above, while Killian clearly describes embedding URLs and/or hyperlinks in broadcast programs, it does not hint that such links (or codes identifying such links) would in any way be useful for identifying the programs in which they are embedded. Since Thomas also fails to provide any such suggestion, the combination of Thomas and Killian fails to teach or suggest claims 8, 21 and 27. Therefore, claims 8, 21 and 27 are unmistakably patentable over the references cited in the Office action.

C. Claim 10 Is Patentable

Similarly, it is clear that independent claim 10 is patentable over Thomas and Killian. Claim 10 recites a meter to capture first and second program identifying data, wherein ***the first program identifying datum is a media link which, when activated, initiates a request for information from a content provider via a network*** and the second program identifying datum is program identifying datum other that a media link. As demonstrated above, the term "media link" must be construed to cover any link that connects a content recipient to additional content, and is distinct from an ancillary code. As also discussed above, while Killian clearly describes embedding URLs and/or hyperlinks in broadcast programs, it does not hint that such media links would in any way be useful for identifying the programs in which they are embedded. Since Thomas also fails to provide any such suggestion, the combination of Thomas and Killian fails to teach or suggest claim 10. Therefore, claim 10 is patentable over the references cited in the Office action.

Ground 8: Claim 18 Is Not Rendered Obvious By Thomas In View Of Killian.

Claim 18 specifies that the system of claim 10 includes a program identifier arranged to identify the program in which the media link is embedded ***by activating the media link to initiate a request for information from the content provider***. As discussed in detail above, while Killian clearly describes embedding URLs and/or hyperlinks in broadcast programs, it does not hint that such media links would in any way be useful for identifying the

programs in which they are embedded. As also discussed above, media links are, by definition, intended to ***uniquely identify the linked content*** (e.g., a referenced web page), ***not the program within which they are embedded.*** Therefore, it is far from obvious that activating a media link to initiate a request for information from the content provider associated with the media link would be useful for identifying the program in which the media link is embedded.

Neither Killian nor Thomas suggest a program identifier that activates a media link to initiate a request for information to identify a program carrying that media link. Therefore, the combination of Thomas and Killian also fails to teach or suggest such a program identifier. Accordingly, claim 18 is patentable over the references cited in the Office action

Conclusion

In view of the foregoing remarks, it is respectfully submitted that all of the rejections made in the final Office action should be overturned.

Respectfully submitted,

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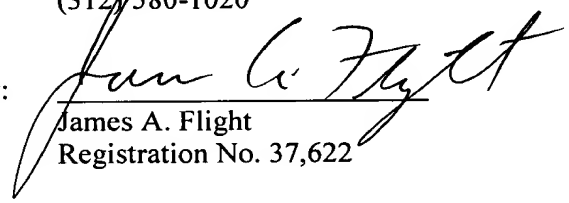
By: 

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VIII. Claims Appendix

1. (Previously Amended) A detection apparatus to identify a program comprising:

a tuner to tune to the program;

a meter coupled to the tuner to record a media link embedded in the program tuned by the tuner; and

a program identifier to identify the program tuned by the tuner based on the media link recorded by the meter.

2. (Previously Presented) The detection apparatus of claim 1 wherein the tuner comprises a scanning tuner.

3. (Previously Amended) The detection apparatus of claim 2 wherein the scanning tuner tunes to a plurality of channels, and wherein the meter is arranged to record media links from programs carried in the tuned channels.

4. (Previously Amended) The detection apparatus of claim 1 wherein the program identifier is arranged to identify the program directly from the media link.

5. (Previously Amended) The detection apparatus of claim 1 wherein the program identifier is arranged to identify the program by

accessing a content provider.

6. (Previously Amended) The detection apparatus of claim 1 wherein the program identifier is arranged to receive a manual identification of the program.

7. (Previously Presented) The detection apparatus of claim 1 wherein the media link is a URL.

8. (Previously Presented) The detection apparatus of claim 1 wherein the media link is a code referenced to a URL.

9. (Previously Presented) The detection apparatus of claim 1 wherein the media link is a trigger.

10. (Previously Amended) A data acquisition system to acquire identifying data from a program comprising:

a tuner to tune to the program; and,

a meter coupled to the tuner and arranged to capture first and second program identifying data identifying the program tuned by the tuner, wherein the first program identifying datum is a media link embedded in the program which, when activated, initiates a request for information from a content provider via a network, and wherein the second program identifying datum is a program identifying datum other than a media link.

11. (Previously Presented) The data acquisition system of claim 10 wherein the tuner comprises a scanning tuner.

12. (Previously Presented) The data acquisition system of claim 11 wherein the scanning tuner tunes to a plurality of channels, wherein the meter is arranged to capture media links from programs in the tuned channels, and wherein the meter is arranged to capture second program identifying data identifying programs in the tuned channels.

13. (Previously Presented) The data acquisition system of claim 10 further comprising a program identifier arranged to identify the program from the first and/or second program identifying data.

14. (Previously Presented) The data acquisition system of claim 13 wherein the program identifier is arranged to identify the program by comparing the first and/or second program identifying data to corresponding first and/or second reference identifying data.

15. (Previously Presented) The data acquisition system of claim 10 wherein the second program identifying datum is a signature extracted from the program.

16. (Previously Presented) The data acquisition system of claim 10 wherein the data acquisition system is arranged to keep the second program identifying datum only if the meter fails to acquire the first program identifying datum.

17. (Previously Presented) The data acquisition system of claim 10 further comprising a program identifier, wherein the program identifier is arranged to identify the program directly from the media link.

18. (Previously Amended) The data acquisition system of claim 10 further comprising a program identifier, wherein the program identifier is arranged to identify the program by activating the media link to initiate the request for information from the content provider.

19. (Previously Presented) The data acquisition system of claim 10 further comprising a program identifier, wherein the program identifier is arranged to receive a manual identification of the program.

20. (Previously Presented) The data acquisition system of claim 10 wherein the media link is a URL.

21. (Previously Presented) The data acquisition system of claim 10 wherein the media link is a code referenced to a URL.

22. (Previously Presented) The data acquisition system of claim 10 wherein the media link is a trigger.

23. (Previously Presented) The data acquisition system of claim 10 wherein the meter is arranged to capture the second program identifying datum from the program only in the event that the meter is unable to capture the first program identifying datum from the program.

24. (Previously Amended) A program identification system comprising:

a tuner tunable to at least one of a plurality of channels;

a meter coupled to the tuner, wherein the meter is arranged to detect a media link embedded in a program carried in a channel tuned by the tuner and to extract a broadcast signature from the program; and

a comparator arranged to generate a subset of reference signatures from a library of reference signatures based upon the media link, and to compare the broadcast signature extracted by the meter to the subset of reference signatures.

25. (Cancelled)

26. (Previously Amended) The program identification system of claim 24 wherein the media link is a URL.

27. (Previously Amended) The program identification system of claim 24 wherein the media link is a code referenced to a URL.

28. (Previously Amended) The program identification system of claim 24 wherein the media link is a trigger.

29. (Previously Amended) A program identification system comprising:

a tuner tunable to at least one of a plurality of channels;

a meter coupled to the tuner, wherein the meter is arranged to detect closed captioning information from a program carried in a channel tuned by the tuner and to extract a broadcast signature from the program; and

a comparator arranged to compare the broadcast signature to a reference signature, wherein the reference signature is selected from a library of reference signatures based upon the closed captioning information.

30. (Previously Amended) The program identification system of claim 24 wherein, if the broadcast signature does not have an embedded media link, the comparator is arranged to generate a second subset of reference signatures from the library of reference signatures based upon a hash code, and to compare the broadcast signature extracted by the meter to the second subset of reference signatures.

31. (Previously Presented) The program identification system of claim 24 wherein the reference signature includes an identification of the program.

32. (Previously Presented) The program identification system of claim 24 wherein the broadcast signature includes the channel and a time at which the broadcast signature is extracted.

33. (Previously Presented) The program identification system of claim 32 wherein the reference signature includes an identification of the program.

34-47. (Cancelled)

48. (Previously Presented) The detection apparatus of claim 1 wherein the media link is a hyperlink.

49. (Previously Presented) The data acquisition system of claim 10 wherein the media link is a hyperlink.

50. (Previously Presented) The program identification system of claim 24 wherein the media link is a hyperlink.

IX. Evidence Appendix

No evidence under 37 C.F.R. § 1.130, 1.131, or 1.132 is being relied upon. The evidence relied upon is reflected in the following table.

Reference	**Entered in Record**
Thomas, US Patent 5,481,294	See PTO-1449 received at PTO on 1/23/02, considered by Examiner on 4/5/04
Lert, US Patent 4,230,990	See PTO-1449 received at PTO on 1/23/02, considered by Examiner on 4/5/04
Lert, US Patent 4,677,466	See PTO-1449 received at PTO on 1/23/02, considered by Examiner on 4/5/04
Killian, US Patent 6,136,316	See PTO-1449 submitted to PTO on 12/5/03, considered by Examiner on 4/5/04

Copies of the above-noted evidence are attached hereto.

X. Related Proceedings Appendix

None.

EVIDENCE IDENTIFIED IN EVIDENCE APPENDIX